



**Board of County Commissioners**  
**Leon County, Florida**  
[www.leoncountyfl.gov](http://www.leoncountyfl.gov)

**Budget Discussion Item**  
**Executive Summary**

June 22, 2010

**Title:**

Mass Notification Solutions

**Staff:**

Parwez Alam, County Administrator  
Vincent S. Long, Deputy County Administrator  
Alan Rosenzweig, Assistant County Administrator  
Scott Ross, Director, Office of Management and Budget  
Pat Curtis, Management and Information Systems Director

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**Issue Briefing:**

This item provides a discussion on the procurement of a mass notification system through funding included in the proposed FY2010/2011 budget. A mass notification system allows hundred of thousands of messages to be broadcast (to phones, cell phones, pdas, etc) for the purpose of informing individuals about public safety issues, natural disasters, government activities, etc.

**Fiscal Impact:**

The proposed budget presented for the workshop includes \$100,000 towards the acquisition of a mass notification system. The recommendation is based contingent upon the City partnering on the acquisition of the system. Total estimated costs range from \$100,000 to \$300,000 depending upon system configuration. If the City does not participate in this project, staff does not recommend pursuing the project.

**Staff Recommendation:**

Option #1: Maintain the \$100,000 included in the proposed budget for the acquisition of a mass notification system, contingent upon the City of Tallahassee partnering on the project.

**Background:**

Enhanced citizen outreach is available through mass notification systems which leverage the technologies of the Internet, radio systems, land and cell phone systems, and/or personal digital assistants (PDA's). A mass notification system can notify large numbers of citizens via voice, text, and/or email messages using databases with citizen phone numbers and site and/or email addresses. GIS mapping abilities exist in most solutions where a set of citizens based on address, zip code, or any user defined geographic zones can be targeted to receive messages relevant for them. Historically, mass notification systems supported the emergency and law enforcement agencies, but now other organizations such Public Works, Elected Officials, Parks & Recreation, Elections, the Health Department, and other divisions of the County Administrator's Office can be supported. Specific examples of notifications are:

- |   |  |  |
|---|--|--|
| <b>Public Safety</b>  | <b>Public Works Alerts</b>   | <b>Government Services</b>   |
| <ul style="list-style-type: none"><li>• Hazardous Materials Spills</li><li>• Missing/Found Child/Senior</li><li>• Bomb Threats</li><li>• Evacuation Alerts</li><li>• Suspect in Area Warnings</li><li>• Neighborhood Watch Alerts</li></ul> | <ul style="list-style-type: none"><li>• Street Closures</li><li>• Detour Alerts</li><li>• Service Alerts</li><li>• Drinking Water Issues</li><li>• Fire Season Safety Reminders</li><li>• Power Outages</li><li>• Debris Pickup</li><li>• Sandbag Distribution</li><li>• Hazardous Waste Drops</li></ul> | <ul style="list-style-type: none"><li>• Flu Clinics &amp; Innoculations</li><li>• Polling Location and Schedule Changes</li><li>• Community Event Announcements</li><li>• Updates to the Media</li><li>• Internal Human Resource Management</li><li>• Election Day Notices</li></ul> |
| <b>Natural Disasters</b>  |  |  |
| <ul style="list-style-type: none"><li>• Hurricanes</li><li>• Tornadoes</li><li>• Flooding</li><li>• Forest Fires</li></ul>  |  |  |

These systems are able to broadcast hundreds or thousands of messages per minute through specialized computing centers and phone system infrastructure that access provider databases of contact information. Provider software manages the outgoing calls to the local area's phone infrastructure and records the status of each call made. Web interfaces to these systems allow local administrators from any location to record messages, set up broadcast parameters, update phone numbers and residential and e-mail addresses, as well as access reports of usage. The web interface provides self-service for citizens to subscribe, unsubscribe, and/or change their contact number as desired. Reports provide statistics of every message, how many calls were answered, how many calls encountered a busy signal, how many calls went to an answering machine, and if any calls did not go through.

Mass notification solutions are a proven technology and have been adopted throughout Florida. Samplings of Florida jurisdictions that are using mass notification solutions are Volusia County, Manatee County, Gulf County, Pinellas County, Gadsden County, Seminole County, Putnam County, Jacksonville-Duval County, City of Hollywood, City of Winter Park, City of Ocala, and Islamorada in Monroe County. Miami is just now selecting a solution for their area and Polk and Lake Counties are pursuing solutions now.

An introduction to mass notification systems was presented at the December 8, 2009 Board Retreat.

Board direction at that time was to prepare a budget discussion item for the FY 2010/2011 budget workshop and to contact the City and learn of their interest to join the County in implementing a solution that could be shared between the governments. The County Administrator sent a letter on February 5, 2010 to the City Manager seeking the City's interest in partnering on a joint purchase. A response from the City has not been received at this time.

**Analysis:**

Costs for a mass notification system are based on four factors: 1) the population of the area, 2) the requirement to develop a private database of contact information or simply use an existing commercial/private database, 3) the message plan, and 4) required infrastructure build-out. With these four factors involved, costs for a mass notification system could range from \$100,000 to \$300,000 plus per year.

The cost of a contact database depends on the intended use of the mass notification system. If the system will be used only for emergency purposes, a jurisdiction can use their existing 911 phone data bases at no cost. However, to gain the most value out of a system, most jurisdictions expect to use their system for non-emergency use as well as emergency use. Therefore, the development of a contact database will be necessary and costs can range up to approximately \$30,000, depending on the source, size of the jurisdiction, and types of phone numbers and/or email addresses (residential, commercial, or cellular).

Message plans are devised with several factors: 1) the length of each message, 2) the number of calls, 3) the number of messages per year, and 4) the guaranteed through-put. Some vendors offer unlimited messaging plans at set fees and/or allow carry forward of unused minutes each year. Other plans assess each call from 3 cents to 25 cents per minute, depending on the vendor and their offering. Text messaging is another assessment.

Another factor involved in the costing of a solution is whether infrastructure is required. Local offerings available through the County's Avaya Phone system and Embarq require one time upfront hardware/software purchases from \$50,000 – \$75,000. In addition to the infrastructure, calls would be assessed charges of up to 20 cents per call per minute. Therefore, a 60 second message for 100,000 contacts could be \$20,000. Other solution providers require no hardware to be installed at County's premises, but charges for each call can be higher.

Speed of broadcasting is another consideration for selecting a mass notification system. Some providers claim to have the infrastructure to guarantee 100,000 broadcasts in 15 minutes. A local implementation on the County's existing phone system configuration will be slower with 144,000 broadcasts being completed within four hours. Speed of broadcasting will need to be defined depending on the type of message (emergency versus non-emergency).

Cost scenarios developed from initial reviews of specific vendor solutions and types of implementations are presented in the table below.

| MODEL                                       | STARTUP<br>FEE OR<br>ON-SITE<br>HARDWARE | PER CALL<br>FEE PER<br>MINUTE | 60 Second<br>Message per<br>100,000 Calls | PROS  | CONS  |
|---|--|-------------------------------|---|---|---|
| In-house<br>Equipment with<br>Unlimited Use | \$75,000                                 | \$0.20                        | \$20,000                                  | Leverage existing<br>Avaya Phone System<br>and more control over<br>contact database. | Potential for high<br>costs with high<br>volume of message<br>events.<br>Slower throughput<br>on calls. |
| Contracted<br>Limited Use                   | \$25,000 -<br>\$100,000                  | \$0.03 -<br>\$0.25            | \$3,000 -<br>\$25,000                     | Manage costs with a<br>limited use plan.  | Potential for high<br>costs with<br>unexpected high<br>volume of message<br>events.                     |
| Contracted<br>Unlimited Use                 | \$145,000 -<br>\$300,000                 | N/A                           | N/A                                       | Known set cost with<br>unlimited use.   | Potential high cost.  |

Should the County consider implementation of a mass notification system, such systems are easily shared with other organizations in the locale. As an example, the City of Tallahassee or the Leon County School Board could be granted administrative rights to use the web interfaces to send out messages and/or update contact information. Reporting of use is included and would enable allocation of costs to other organizations for cost sharing.

Preliminary reviews of existing solutions have found that the same functionality is available among all solutions. Differentiation of solutions is found in the user interface, the cost plans, the support structure, and whether or not any infrastructure is housed on-site. Should the Board decide to budget for a mass notification solution for Leon County, it is recommended that the solution be chosen through a RFP process. As there are many potential solutions for mass notification with similar functionality, a competitive process will ensure Leon County selects a cost effective solution.

**Options:**

1. Maintain the \$100,000 included in the proposed budget for the acquisition of a mass notification system, contingent upon the City of Tallahassee partnering on the project.
2. Remove the \$100,000 included in the proposed budget for the acquisition of a mass notification system.
3. Provide Board direction to staff.

**Recommendation:**

Option #1 is included in the proposed budget.

**Attachments:**

1. February 5, 2010 Letter to City Manager Anita Favors-Thompson



# Leon County

## Board of County Commissioners

301 South Monroe Street, Tallahassee, Florida 32301  
(850) 606-5302 www.leoncountyfl.gov

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### Commissioners

BILL PROCTOR

District 1

JANE G. SAULS

District 2

JOHN DAILEY

District 3

BRYAN DESLOGE

District 4

BOB RACKLEFF

District 5

CLIFF THAELL

At-Large

AKIN AKINYEMI

At-Large

PARWEZ ALAM

County Administrator

HERBERT W.A. THIELE

County Attorney

February 5, 2010

Ms. Anita Favors Thompson

City Manager

City of Tallahassee

300 South Adams Street

Tallahassee, Florida 32301

Dear Ms. Thompson:

A handwritten signature in cursive script, appearing to read "Anita", written over the name "Anita" in the address block.

As you are aware, over the past three fiscal years, Leon County and the City of Tallahassee have been under extraordinary fiscal pressures caused by property tax reform and more recently the recession economy. These factors have required the City and County to shrink expenditures to keep pace with reduced resources while still maintaining quality services to our citizens.

In order to provide economies of scale in our efforts to reduce our budgets, the Board of County Commissioners requested that staff work with the City to determine the possibility of pooling and/or combining internal service functions such as purchasing, human resources, and management information systems. Such an effort could eliminate duplicative functions, and provide savings to the citizens of both the City and County.

In addition, during its annual treat, the Board instructed staff to works with the City to determine if there was interest in jointly implementing a unified mass public notification system. Such a system could provide significant benefits to the community with regards to notifying our citizens of various alerts, emergencies, and other public notices that need to be disseminated to the community quickly.

The County will be considering budgeting funds for such a system in FY 2011. If the City were to partner with the County in jointly funding such a project, this would be another opportunity for our governments to combine resources to provide an important community service.

I appreciate your willingness to consider these proposals, and look forward to hearing from you regarding which staff you would like us to work with in reviewing the possibility of sharing internal service functions, and mass public notification efforts.

Sincerely,

A handwritten signature in cursive script, appearing to read "Parwez Alam", written in dark ink.

Parwez Alam  
County Administrator

CC: Board of County Commissioners  
Vincent S. Long, Deputy County Administrator  
Alan Rosenzweig, Assistant County Administrator  
Scott Ross, Director, Office of Management and Budget

